

Work Order ID 165107

Tuesday, August 15, 2017 3:19:17 PM

165107

Page 1

Item ID: D4635-044

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Aft Ceiling Panel Assembly, RH

Start Date: 8/21/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 9/1/2017 Req'd Qty: 1.00

1

Customer:

Reference:

DAS

21

Approvals:

Process Plan:

9-89

Date: AUG 16 2017

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4635	F

100

0.00

100

HandThermo

Memo

0.00

Hand Finishing Thermoforming

Pick Kit

SEP 13 2017

DAS

6

9-89

110

0.00

110

Small Fab

Memo

0.98

Small Fab

1- Assemble as per Dwg D4635-044

2-Install speaker

3- Install Air valve

4-Install Wiring Harness

5-Install wiring harness

DAS

07

9-89

17/09/18

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Work Order ID 165107

Tuesday, August 15, 2017 3:19:18 PM

165107

Page 2

Item ID: D4635-044 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Aft Ceiling Panel Assembly, RH
Start Date: 8/21/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 9/1/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC5- Inspect part completeness to step on W/O	0.00							
120									
QC	Memo	0.02							
Quality Control									
130	Identify as per dwg & Stock Location: _____	0.00							
130									
Packaging	Memo	0.01							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.10							
Quality Control									

17/9/25 *[Signature]*
ccy 17/9/22

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Root Cause		FAULT CATEGORY																																																															
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Misidentified ☐	Past Due ☐																																																																

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165107

D4635-044

Required Date: 9/1/2017

Required Qty: 1.00

IPP Rev. F

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4635-144		Manufactured	No			100	Each	0.0000	1	1			
D4635-144 Aft Ceiling Replacement Panel Assembly, RH													
D4652-5		Manufactured	No			100	Each	11.0000	1	1			
D4652-5 Air Valve, 1.25 Id Disk Type													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				MF003				11					
				122691				2					
				155417				9					
MS21919-WDG8		Purchased	No			100	Each	54.0000	3	3			
MS21919-WDG8 Clamp													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				over008				49					
				m137320				25					
				m138207				24					
				ST293				5					
				m136537				5					

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Page 2

Work Order ID: 165107

165107

Parent Item: D4635-044

D4635-044

Parent Item Name: Aft Ceiling Panel Assembly, RH

Start Date: 8/21/2017

Required Date: 9/1/2017

Start Qty: 1.00

Required Qty: 1.00

D4708-9

Manufactured No

100 Each

11.0000

1 1

D4708-9

Lanyard

**

SEP 13 2017

DAS
6
9-89

Location

Loc Qty

Loc Code

MF004

11

154884

11

MS21044-N08

Purchased No

100 Each

130.0000

4 4

MS21044-N08

Nut

**

SEP 13 2017

DAS
6
9-89

Location

Loc Qty

Loc Code

ST302

130

m131452

12

m136502

18

m136537

100

D4646-1

Manufactured No

100 Each

13.0000

1 1

D4646-1

Plenum Cap Assembly

**

SEP 13 2017

DAS
6
9-89

Location

Loc Qty

Loc Code

MF009

13

156116

13

D4728-046

Manufactured No

100 Each

12.0000

1 1

D4728-046

RH Cabin Speaker #3

**

SEP 13 2017

DAS
6
9-89

Location

Loc Qty

Loc Code

MF002

3

124239

3

MF009

9

124239

9

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
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Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

Tuesday, August 15, 2017 3:19:21 PM

Page 3

Work Order ID: 165107

165107

Parent Item: D4635-044

D4635-044

Parent Item Name: Aft Ceiling Panel Assembly, RH

Start Date: 8/21/2017

Required Date: 9/1/2017

Start Qty: 1.00

Required Qty: 1.00

MS24693-BB51

Purchased

No

100

Each

349.0000

4

4

MS24693-BB51

Screw

**

SEP 13 2017

DAS
6
9-89

Location

Loc Qty

Loc Code

ST288

349

m128057

349

D4655-1

Manufactured

No

100

Each

17.0000

1

1

D4655-1

Speaker

**

SEP 13 2017

DAS
6
9-89

Location

Loc Qty

Loc Code

MF002

17

117634

1

154865

16

D4743-1

Manufactured

No

100

Each

20.0000

1

1

D4743-1

Speaker Grill

**

SEP 13 2017

DAS
6
9-89

Location

Loc Qty

Loc Code

MF005

20

154770

4

155856

8

164337

8

NAS1149DN832J

Purchased

No

100

Each

1,962.000

4

4

NAS1149DN832.J

Washer

**

SEP 13 2017

DAS
6
9-89

Location

Loc Qty

Loc Code

ST264

1962

M129499

16

M131697

64

M137587

1882

D4652-3

M164538

DAS
07
9-89
15/09/18
Page 3

Tuesday, August 15, 2017 3:19:21 PM

Shop Packet Print

DQA: _____ Date: _____

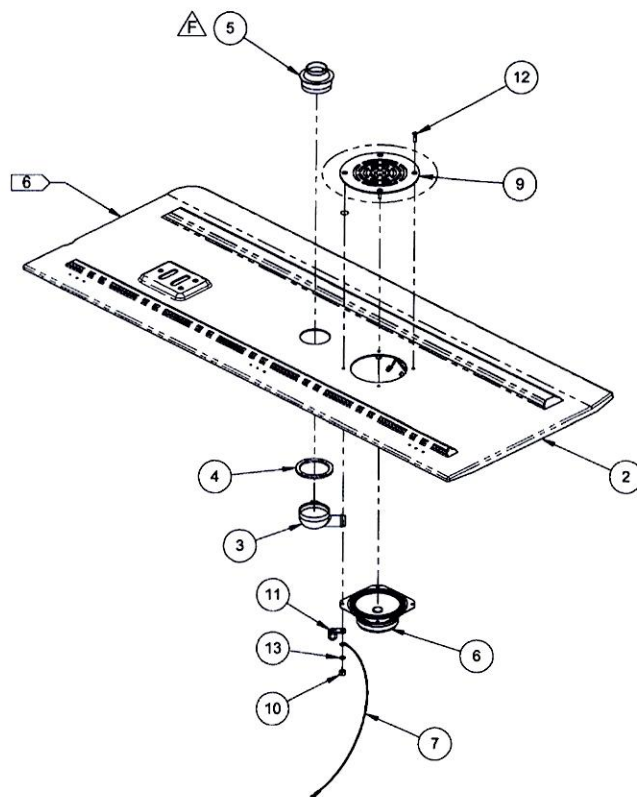
WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
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Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			OTHER : ☐																	



D4635-044 RH, AFT CEILING PANEL ASSY

ITEM	QTY -044	P/N	DESCRIPTION
1	X	D4635-044	RH, AFT CEILING PANEL ASSY
2	1	D4635-144	RH, AFT CEILING REPLACEMENT PANEL ASSY
3	1	D4646-1	PLENUM CAP ASSEMBLY
4	1	D4652-3 (REF)	MOUNTING NUT (PART OF D4652-5)
5	1	D4652-5	AIR VALVE, 1.16 ID DISK TYPE
6	1	D4655-1	SPEAKER
7	1	D4708-9	LANYARD
8	1	D4728-046	RH SPEAKER #3 HARNESS ASSY
9	1	D4743-1	SPEAKER GRILL
10	4	MS21044-N08	NUT, SELF-LOCKING
11	3	MS21919WDG8	CLAMP
12	4	MS24693-BB51	SCREW, CSK 100°
13	4	NAS1149DN832J	WASHER

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 165107 MJS
170816

RELEASED

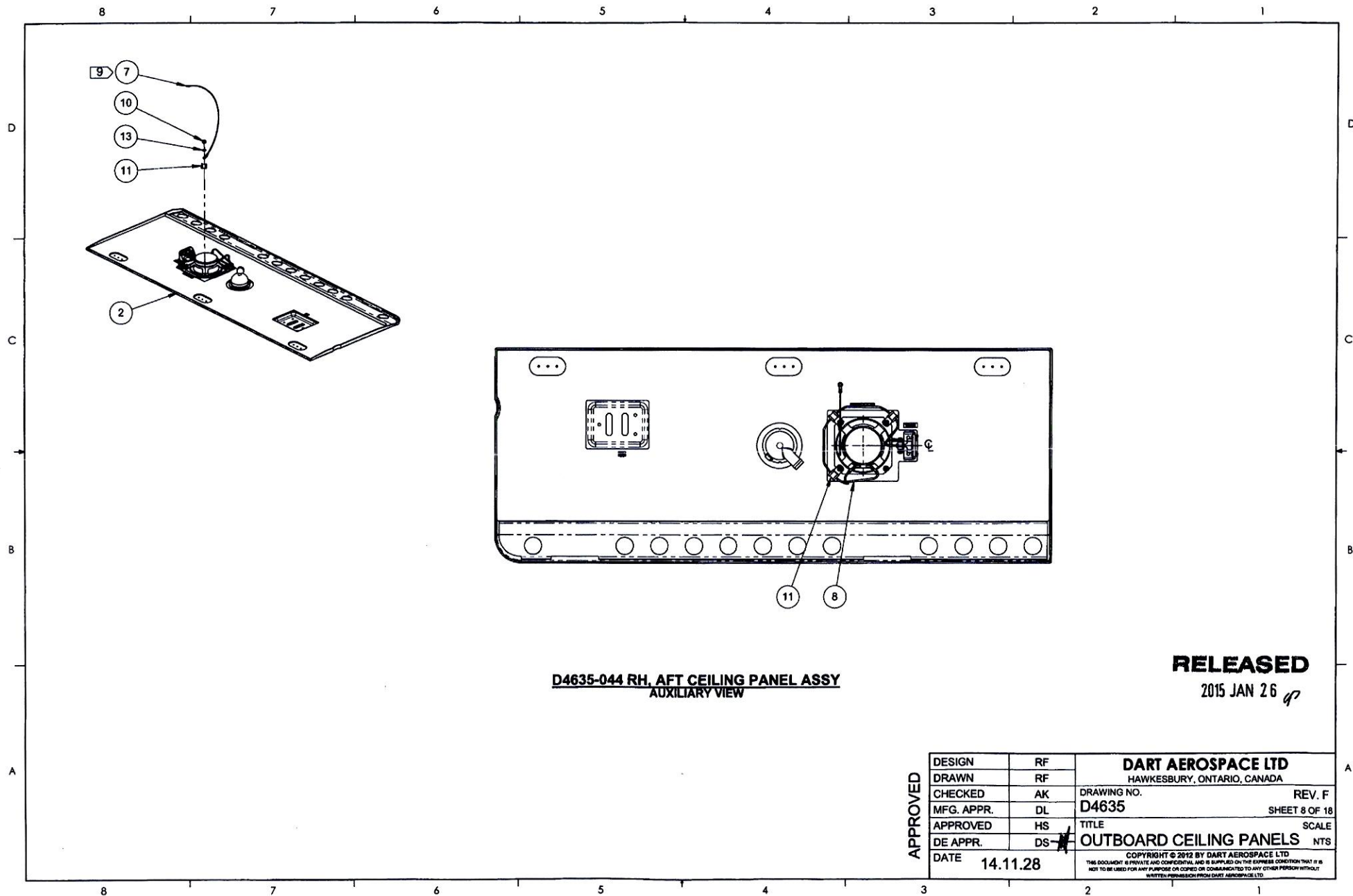
2015 JAN 26 up

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.4, ON SMOOTH SIDE
- 7) WEIGHT: 5.0 lbs
- 8) INSTALL D4728-046 WIRE HARNESS PER QSI 048
- 9) ON D4708-9 LANYARD OPEN TO Ø0.196 BOTH ENDS

APPROVED

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	AK	DRAWING NO.	REV. F
MFG. APPR.	DL	D4635	SHEET 7 OF 18
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	OUTBOARD CEILING PANELS	NTS
DATE	14.11.28	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



D4635-044 RH, AFT CEILING PANEL ASSY
AUXILIARY VIEW

RELEASED

2015 JAN 26 *q*

APPROVED

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	AK	DRAWING NO.	REV. F
MFG. APPR.	DL	D4635	SHEET 8 OF 18
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	OUTBOARD CEILING PANELS	NTS
DATE	14.11.28	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	